

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	RONALD W. KORZUN ET AL.)
) Group Art Unit: 3745
Serial No:	10/708,909)
) Examiner: Edgar, Richard A.
Filed:	March 31, 2004)
) Confirmation No. 2908
For:	INTEGRAL COVERED NOZZLE)
	WITH ATTACHED OVERCOVER)

APPEAL BRIEF UNDER 37 C.F.R. §41.37

I. THE REAL PARTY IN INTEREST

The real party in interest in this appeal is General Electric Company. Ownership by General Electric Company is established by an assignment document recorded for this application on March 31, 2004 at Reel 014463 and Frame 0749.

II. RELATED APPEALS AND INTERFERENCES

None.

III. STATUS OF CLAIMS

Currently, claims 1-19 are pending. Claims 1-19 are currently rejected.

IV. STATUS OF AMENDMENTS

There have been no amendments filed subsequent to receipt of the most recent Final Office Action dated September 15, 2006.

V. SUMMARY OF CLAIMED SUBJECT MATTER

A concise explanation of the subject matter defined in each of the independent claims 1 and 10 involved in the appeal is provided below:

Claim 1

Independent claim 1 claims a “multiple group of blades for an integral covered nozzle of a turbine.”

The multiple group of blades is recited as comprising, “multiple stationary nozzle blades supported by a turbine stator.” Figure 2 illustrates an integral covered nozzle (ICN) 100 that includes a nozzle blade 104 that is affixed to dovetail segment 102 at one end and is affixed to a cover portion 106 at an opposite end. Page 5, lines 10-13 and Figure 2. Three ICN’s 100, all including nozzle blades 104, are shown coupled together in Figure 3 via facing sides 118. Page 5, lines 17-18 and Figure 3. It is contemplated that the term “multiple” means including two or more ICN’ 100, and thus, two or more nozzle blades 104. Page 5, lines 19-21.

Furthermore, as is described at page 5, lines 10-13, each nozzle blade 104 in these groups of ICN’s 100 includes a dovetail segment 102 configured to be operably fixed in a groove in an inner carrier. Referring to Figure 1, the inner carrier is a casing 12 or stator of a turbine 10, to which blades 20 (the nozzle 100 referred to above and in Figure 2) are conventionally mated. Page 5, lines 3-5 and Figure 1. The inner carrier or casing 12 is referred to as a stator in the original specification at page 3, line 16 and page 9, line 11. By means of the mating with the stator 12, the nozzle blades 104 of the group of ICN’s 100 are supported by the stator 12, as recited in Applicant’s claim 1. As a stator supports these nozzle blades 104, the blades 104 are commonly known to be stationary (also see page 1, lines 6-8).

The multiple group of blades is further recited as comprising, “multiple respective cover portions defining a first surface configured to span tips of multiple adjacent nozzle blades between tip locations of adjacent nozzle blades thereby to form the cover portions for adjacent nozzle blades and wherein the cover portions associated with each respective adjacent nozzle blade includes facing sides for adjacent cover portions of adjacent nozzle blades.” As shown in Figure 3, multiple adjacent nozzle blades 104 are shown with a cover 106 spanning their tips. This association between cover 106 and blade 104 is described for an individual nozzle blade 104 at page 5, line 13, wherein the nozzle blade 104 is affixed to the cover portion 106 at one end (see Figures 2 and 3). In an exemplary embodiment of the invention, cover portions 106 can be affixed to the tips 111 of each blade 104 by suitable welding or brazing. Page 7, lines 9-10 and Figure 5. As shown best in Figure 2, this affixing clearly takes place at a surface corresponding with outer circumferential face portion 122 of the cover portion 106.

Referring to page 5, lines 18-19 and page 4, lines 7-8, the cover portion 106 of each ICN 100 includes two facing sides 118 (see also Figures 2 and 5). As is shown best in Figure 5, each facing side 118 is configured for association with an adjacent cover portion 106 at an interface 121. The interfaces 121 are of a nature such that a snug fit can be achieved between adjacent cover portion portions 106 (page 6, lines 22-24), wherein the interfaces 21 can have different interlocking shapes, such as a Z-cut construction, straight line construction rectangularly directed relative to the turbine blading and parallel to the rotor's rotational axis, double wing or nested construction, single wing construction, or diagonal line construction (page 6, lines, 15-22 and Figures 4a-e). In an exemplary embodiment, the cover portions 106 may also be tack welded at 132. Page 7, line 2 and Figure 5.

The multiple group of blades is still further recited as comprising an “overcover coupled to a second surface opposite said first surface of said respective cover portions, said overcover configured to at least one of stiffen deterministic constraints of said tips and seal

against leakage through said facing sides for adjacent cover portions.” As is shown best in Figures 2, 3, and 5, an overcover 110 disposed over each of the cover portions 106. Page 5, lines 19-20 and Figures 2, 3, and 5. Referring to Figure 2, the second surface opposite the first surface is clearly shown at a surface corresponding with inner circumferential face portion 123, which is opposite the surface corresponding with outer circumferential face portion 122. The overcover 110 may associate with the cover 106 via a tenon 108 extending from each cover portion 106 (page 5, line 24) or other methods of retaining, such as brazing or welding (page 6, lines 1-2). The overcover 110 not only groups the nozzles to stiffen and maintain deterministic tip constraints, but also seals any leakage that may occur between adjacent integral covered nozzles 100 thorough interface 121. Page 7, lines 13-15.

Claim 10

Independent claim 10 claims “a method of constructing equivalent integral covered blading for a turbine having multiple blades.”

The method of claim 10 is recited as comprising, “attaching multiple stationary nozzle blades supported by a turbine stator with multiple respective cover portions on a first surface thereof configured to span tips of multiple adjacent nozzle blades between tip locations of adjacent nozzle blades and wherein the cover portions associated with each respective adjacent nozzle blade includes facing sides for adjacent cover portions of adjacent nozzle blades.” As was discussed above with reference to claim 1, Figure 2 illustrates an integral covered nozzle (ICN) 100 that includes a nozzle blade 104 that is affixed to dovetail segment 102 at one end and is affixed to a cover portion 106 at an opposite end. Page 5, lines 10-13 and Figure 2. Three ICN’s 100, all including nozzle blades 104, are shown coupled together in Figure 3 via facing sides 118. Page 5, lines 17-18 and Figure 3. It is contemplated that the term “multiple” means including two or more ICN’100, and thus, two or more nozzle blades 104. Page 5, lines 19-21.

As is described at page 5, lines 10-13, each nozzle blade 104 in these groups of ICN's 100 includes a dovetail segment 102 configured to be operably fixed in a groove in an inner carrier. Referring to Figure 1, the inner carrier is a casing 12 or stator of a turbine 10, to which blades 20 (the nozzle 100 referred to above and in Figure 2) are conventionally mated. Page 5, lines 3-5 and Figure 1. The inner carrier or casing 12 is referred to as a stator in the original specification at page 3, line 16 and page 9, line 11. By means of the mating with the stator 12, the nozzle blades 104 of the group of ICN's 100 are supported by the stator 12, as recited in Applicant's claim 10. As a stator supports these nozzle blades 104, the blades 104 are commonly known to be stationary (also see page 1, lines 6-8).

In addition, as shown in Figure 3, multiple adjacent nozzle blades 104 are shown with a cover 106 spanning their tips. This association between cover 106 and blade 104 is described for an individual nozzle blade 104 at page 5, line 13, wherein the nozzle blade 104 is affixed to the cover portion 106 at one end (see Figures 2 and 3). In an exemplary embodiment of the invention, cover portions 106 can be affixed to the tips 111 of each blade 104 by suitable welding or brazing. Page 7, lines 9-10 and Figure 5. As shown best in Figure 2, this affixing clearly takes place at a surface corresponding with outer circumferential face portion 122 of the cover portion 106.

Referring to page 5, lines 18-19 and page 4, lines 7-8, the cover portion 106 of each ICN 100 includes two facing sides 118 (see also Figures 2 and 5). As is shown best in Figure 5, each facing side 118 is configured for association with an adjacent cover portion 106 at an interface 121. The interfaces 121 are of a nature such that a snug fit can be achieved between adjacent cover portion portions 106 (page 6, lines 22-24), wherein the interfaces 21 can have different interlocking shapes, such as a Z-cut construction, straight line construction rectangularly directed relative to the turbine blading and parallel to the rotor's rotational axis, double wing or nested construction, single wing construction, or diagonal line construction (page 6, lines, 15-22 and Figures 4a-e). In an exemplary

embodiment, the cover portions 106 may also be tack welded at 132. Page 7, line 2 and Figure 5.

The method of claim 10 is further recited as comprising, “coupling an overcover to a second surface opposite said first surface of said respective cover portions, said overcover configured to at least one of stiffen deterministic constraints of said tips and seal against leakage through said facing sides for adjacent cover portions.” As was also discussed above with reference to claim 1, and is shown best in Figures 2, 3, and 5, an overcover 110 disposed over each of the cover portions 106. Page 5, lines 19-20 and Figures 2, 3, and 5. Referring to Figure 2, the second surface opposite the first surface is clearly shown at a surface corresponding with inner circumferential face portion 123, which is opposite the surface corresponding with outer circumferential face portion 122. The overcover 110 may associate with the cover 106 via a tenon 108 extending from each cover portion 106 (page 5, line 24) or other methods of retaining, such as brazing or welding (page 6, lines 1-2). The overcover 110 not only groups the nozzles to stiffen and maintain deterministic tip constraints, but also seals any leakage that may occur between adjacent integral covered nozzles 100 thorough interface 121. Page 7, lines 13-15.

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

There are multiple grounds of rejection to be reviewed on appeal: the rejection of claims 1-3 and 10-12 under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 3,702,221 to Ortolano (hereinafter “Ortolano ‘221”) in view of United States Patent No. 5,215,432 to Pickering (hereinafter “Pickering”); the rejection of claims 1-4 and 10-13 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,238,368 to Ortolano (Ortolano ‘368 hereinafter) in view of U.S. Patent No. 2,315,641 to Mosser (Mosser hereinafter), and further in view of Pickering; the rejection of claims 5, 14, and 18 under 35 U.S.C. §103(a) as being unpatentable over Ortolano ‘221 in view of Pickering, and further in view of United States Patent No. 2,277,484 to Flanders (“Flanders” hereinafter); the rejection of claims 4 and 13 under 35 U.S.C. §103(a) as being unpatentable over Ortolano ‘221 in view of Pickering, and further in view of Mosser; the rejection of claims 6-9 under 35 U.S.C. §103(a) as being unpatentable over Ortolano ‘221 in view of Pickering, in view of Flanders, and further in view of Ortolano ‘368; and the rejection of claims 15-17 and 19 under 35 U.S.C. §103(a) as being unpatentable over Ortolano ‘221 in view of Pickering, and further in view of Ortolano ‘368.

VII. ARGUMENT

A. REJECTION OF CLAIMS 1-3 AND 10-12

Claims 1-3 and 10-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ortolano '221 in view Pickering.

To establish a *prima facie* obviousness under 35 U.S.C. § 103(a), three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

(i) The Ortolano '221 and Pickering references do not contain some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

Applicants' claim 1 recites in part,

“multiple stationary nozzle blades supported by a turbine stator ...multiple respective cover portions defining a first surface configured to span tips of multiple adjacent nozzle blades, and...an overcover coupled to a second surface opposite said first surface of said respective cover portions.”

Applicant respectfully disagrees with the Examiner's conclusion that it would have been obvious to one of ordinary skill in the art to combine the overcover of the rotor blades of Ortolano '221 with the nozzle blades of Pickering to teach the above recited element. The Examiner alleges this combination to be obvious because the nozzle blades of Pickering and rotor blades of Ortolano '221 are both usable in turbine engines and may be subject to some of the same “vibratory forces” (see the Office Action of September 15,

2006). Applicant respectfully submits that this conclusion is analogous to concluding that an advancement in the rotating blade of a common household fan could be obviously modified and combined with a stationary segment of the casing (or blade guard) of that fan, simply because both the fan blade and casing segment are involved in aerodynamic movement of air, and thus may be subject to some of the same vibratory forces. Both rotor blades and common fan blades are configured to actuate movement of air via blade rotation, and both stator nozzle blades and segments of a fan casing are stationary and configured to allow air to move past and around their geometrical structure. Because of the obvious functional differences between fan blades and casing segments, common fan blades and casing segments clearly and inherently include structural differences. Applicant respectfully submits that these clear differences are analogous to the clear and inherent structural differences between rotor blades and stationary nozzle blades. Thus, like combining/modifying an advancement in fan blades for use with casing segments, combining/modifying an advancement in rotor blades for use in stationary nozzle blades would require a spark of inventive ingenuity. As such, the proposed combination of the overcover of Ortolano '221 and the nozzle blades of Pickering would not be obvious to one of ordinary skill in the art because, like the differences between the common fan blade and casing segment, the rotor blade and nozzle blade are differently constructed elements of a turbine engine, which are designed for performance of very different tasks. Therefore, for at least these reasons, Applicant respectfully submits that there would not be obvious persons of ordinary skill in the art to combine the Ortolano '221 and Pickering references.

In addition, Applicant respectfully submits that at least some of the vibratory forces to which the Examiner refers are different for nozzle blades and rotor blades. For example, cover steady state stresses for nozzle blades are different than those of rotor blades. The stresses for nozzles point radially inward. As such, cover expansion will "fight" nozzle inward growth, which is different from rotating blades that are supported from the inner diameter and are growing outward. Thus, contrary to Examiner's contention that rotor blades and nozzle blades are subject to the same stresses, Applicant respectfully submits

that the inward growth of the nozzle blades is a different stress than the outward growth of the rotor blades. As such, proper design execution of the overcover nozzle blade arrangement requires further design, analysis, and assembly test rigor, which is not taught explicitly or implicitly in either Ortolano '221 or Pickering. Since the rotor blade-designed overcover of Ortolano '221 is not explicitly or implicitly taught to be effective or used with nozzle blades, it would not be obvious to modify or combine Ortolano '221 and Pickering to teach a cover that is "configured to span tips of multiple adjacent nozzle blades."

Accordingly, for at least the reasons set forth above, Applicant respectfully submits that Ortolano '221 and Pickering should not be combined to teach any of the elements of Applicant's claim 1, or claims 2-3 that depend therefrom.

Similarly, method claim 10 claims in part,

"attaching multiple stationary nozzle blades supported by a turbine stator with multiple respective cover portions configured to span tips of multiple adjacent nozzle blades...and coupling an overcover to a second surface opposite said first surface of said respective cover portions."

Again, referring to the above discussion, there is no suggestion or motivation in Ortolano '221, Pickering, or the knowledge generally available to one of ordinary skill in the art to modify or combine Ortolano '221 and Pickering to teach a cover that is "configured to span tips of multiple adjacent nozzle blades." Accordingly, Applicant respectfully submits that Ortolano '221 and Pickering should not be combined to teach any of the elements of Applicant's claim 10, or claims 11-12 that depend therefrom.

In addition, MPEP 2143.01 section I states that, "there are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art," *In re Rouffet*, 149 F.3d 1350. As was mentioned above, an overcover of a nozzle blade would be subject to different stresses (fighting of inward growth as opposed to fighting of

outward growth). Ortolano '221 teaches an overcover for rotor blades that is inherently designed to solve the problem of outward growth of the blades. Pickering teaches stator nozzles that are inherently subject to the stresses of inward growth. As such, the nature of the problem to be solved in Pickering would be to fight nozzle inward growth, while the nature of the problem to be solved in Ortolano '221 is the fighting of outward growth. Thus, the nature of the problem to be solved in each reference is different.

Since there is also no explicit or implicit teaching in the prior art that would suggest combination of Ortolano '221 and Pickering, and, being that these references involve different components for different tasks (see the fan blade and casing segment portion of Applicant's Arguments), there is no objective reason for persons of ordinary skill in the art to combine the references (the objective reason being required by *In re Mills*, 916 F.2d 680). Therefore, Applicant respectfully submits that a combination of Ortolano '221 and Pickering is not supported by any of the three sources discussed above.

Applicants respectfully assert that claims 1-3 and 10-12 are allowable over Ortolano in view of Pickering.

B. REJECTION OF CLAIMS 1-4 AND 10-13

Claims 1-4 and 10-13 are rejected under 35 U.S.C. §103(a) as being unpatentable over Ortolano '368 in view of Mosser, in further view of Pickering.

Since Ortolano '368 only teaches an overcover for a rotor blade (Ortolano '368 suggest nothing more of stator nozzle blades than does Ortolano '221), and Mosser only teaches a connecting cover (tie bands) for a rotor blade, Applicant respectfully submits that for the same reasons as discussed in Part A of the Argument section of the Brief, there is no suggestion found in Ortolano '368, Mosser, Pickering or the knowledge available to one of ordinary skill in the art to combine Ortolano '368 and Mosser with Pickering to teach a

cover that is “configured to span tips of multiple adjacent nozzle blades.” Accordingly, Applicant respectfully submits that Ortolano ‘368 and Mosser should not be combined with Pickering to teach any of the elements of Applicant’s claims 1 and 10, or claims 2-4 and 11-13 that depend respectively therefrom.

C. REJECTION OF CLAIMS 5, 14, AND 18

Claims 5, 14, and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Ortolano ‘221 in view of Pickering, in further view of Flanders.

As claim 5 depends from claim 1, and claims 14 and 18 depend from claim 10, and since Flanders does not suggest combination of a rotor blade overcover with a cover configured to the span tips of stator nozzles any more so than does Ortolano ‘221 and Pickering, for the same reasons as discussed in Part A of the Argument section of the Brief, Applicant respectfully submits that there is no suggestion found in Ortolano ‘221, Flanders, Pickering or the knowledge available to one of ordinary skill in the art to combine Pickering with Ortolano ‘221 and Flanders to teach a cover that is “configured to span tips of multiple adjacent nozzle blades.” Accordingly, Applicant respectfully submits that Ortolano ‘221 and Flanders, should not be combined with Pickering to teach any of the elements of Applicant’s claims 5, 14, and 18.

D. REJECTION OF CLAIMS 4 AND 13

Claims 4 and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over Ortolano ‘221 in view of Pickering, in further view of Mosser.

As claim 4 depends from claim 1, and claim 13 depends from claim 10, and since Mosser does not suggest combination of a rotor blade overcover with a cover configured to the span tips of stator nozzles any more so than does Ortolano ‘221 and Pickering, for the

same reasons as discussed in Part A of the Argument section of the Brief, Applicant respectfully submits that there is no suggestion found in Ortolano '221, Mosser, Pickering or the knowledge available to one of ordinary skill in the art to combine Ortolano '221 and Mosser with and Pickering to teach a cover that is "configured to span tips of multiple adjacent nozzle blades." Accordingly, Applicant respectfully submits that Ortolano '221 and Mosser should not be combined with Pickering to teach any of the elements of Applicant's claims 4 and 13.

E. REJECTION OF CLAIMS 6-9

Claims 6-9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Ortolano '221 in view of Pickering, in view of Flanders, in further view of Ortolano '368.

As claims 6-9 depend from claim 1, and since Flanders and Ortolano '368 do not suggest combination of a rotor blade overcover with a cover configured to the span tips of stator nozzles any more so than does Ortolano '221 and Pickering, for the same reasons as discussed in Part A of the Argument section of the Brief, Applicant respectfully submits that there is no suggestion found in Ortolano '221, Flanders, Pickering, Ortolano '368 or the knowledge available to one of ordinary skill in the art to combine Ortolano '221, Flanders, and Ortolano '368 with Pickering to teach a cover that is "configured to span tips of multiple adjacent nozzle blades." Accordingly, Applicant respectfully submits that Ortolano '221, Flanders, and Ortolano '368 should not be combined with Pickering to teach any of the elements of Applicant's claims 6-9.

F. REJECTION OF CLAIMS 15-17 AND 19

Claims 15-17 and 19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Ortolano '221 in view of Pickering, in further view of Ortolano '368.

As claims 15-17 and 19 depend from claim 10, and since Ortolano '368 does not suggest combination of a rotor blade overcover with a cover configured to the span tips of stator nozzles any more so than does Ortolano '221 and Pickering, for the same reasons as discussed in Part A of the Argument section of the Brief, Applicant respectfully submits that there is no suggestion found in Ortolano '221, Pickering, Ortolano '368 or the knowledge available to one of ordinary skill in the art to combine Ortolano '221 and Ortolano '368 with Pickering to teach a cover that is "configured to span tips of multiple adjacent nozzle blades." Accordingly, Applicant respectfully submits that Ortolano '221 and Ortolano '368 should not be combined with Pickering to teach any of the elements of Applicant's claims 15-17 and 19.

VIII. CLAIMS APPENDIX

1. A multiple group of blades for an integral covered nozzle of a turbine comprising:

multiple stationary nozzle blades supported by a turbine stator;

multiple respective cover portions defining a first surface configured to span tips of multiple adjacent nozzle blades between tip locations of adjacent nozzle blades thereby to form the cover portions for adjacent nozzle blades and wherein the cover portions associated with each respective adjacent nozzle blade includes facing sides for adjacent cover portions of adjacent nozzle blades; and

an overcover coupled to a second surface opposite said first surface of said respective cover portions, said overcover configured to at least one of stiffen deterministic constraints of said tips and seal against leakage through said facing sides for adjacent cover portions.

2. Blades as claimed in claim 1 wherein each of said multiple respective cover portions include a tenon extending therefrom and through an aperture configured in said overcover.

3. Blades as claimed in claim 2 wherein said tenon is one of peened, welded, and brazed with respect to said overcover.

4. Blades as claimed in claim 1 wherein said overcover is configured having a thickness less than each of said multiple respective cover portions.

5. Blades as claimed in claim 1 wherein said overcover is one of welded and brazed to said second surface of said multiple respective cover portions.

6. Blades as claimed in claim 5 further comprising:

a material buildup on at least one facing side of the cover portions, the material buildup having been machined to develop an interface between adjacent cover portions of adjacent nozzle blades.

7. Blades as claimed in claim 6 wherein the material buildup is applied by a selectively mechanical or metallurgical action on both facing sides of the cover portion.

8. Blades as claimed in claim 7 wherein the material buildup is applied between cover portions on all adjacent nozzle blades thereby to effect integral covered blading.

9. Blades as claimed in claim 6 including a selectively applied underweld or underbrazed between a cover portion and a blade tip thereby to effectively secure the cover portion to the blade.

10. A method of constructing equivalent integral covered blading for a turbine having multiple blades:

attaching multiple stationary nozzle blades supported by a turbine stator with multiple respective cover portions on a first surface thereof configured to span tips of multiple adjacent nozzle blades between tip locations of adjacent nozzle blades and wherein the cover portions associated with each respective adjacent nozzle blade includes facing sides for adjacent cover portions of adjacent nozzle blades; and

coupling an overcover to a second surface opposite said first surface of said respective cover portions, said overcover configured to at least one of stiffen deterministic constraints of said tips and seal against leakage through said facing sides for adjacent cover portions.

11. The method as claimed in claim 10 further comprising:

disposing a tenon extending from each of said multiple respective cover portions, said tenon extending through an aperture configured in said overcover.

12. The method as claimed in claim 11 further comprising one of:

peening;

welding; and

brazing said tenon with respect to said overcover.

13. The method as claimed in claim 11 further comprising:

configuring said overcover having a thickness less than each of said multiple respective cover portions.

14. The method as claimed in claim 10 wherein said overcover is one of welded and brazed to said second surface of said multiple respective cover portions.

15. The method as claimed in claim 10 further comprising:

positioning said nozzle blades adjacent to each other and applying a material buildup on at least one facing side of the cover portions of said adjacent nozzle blades;

machining the material buildup thereby developing an interface between adjacent cover portions for each of said adjacent nozzle blade; and

replacing the nozzle blades in a turbine after said coupling an overcover thereby forming equivalent integral covered nozzles.

16. The method as claimed in claim 15 wherein the material buildup is applied by a selectively mechanical or metallurgical action on both facing sides of the cover portions.

17. The method as claimed in claim 15 wherein the material buildup is applied between cover portions on all adjacent nozzle blades thereby to produce the effect of an integral cover.

18. The method as claimed in claim 11 including applying selectively an underweld or underbrazed between a cover portion and a nozzle blade tip thereby to effectively secure the cover portion to the nozzle blade.

19. The method as claimed in claim 15 wherein the material buildup extends beyond a circumferential outerface of the cover and a circumferential innerface of the cover, such extensions being subject to subsequent machining.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

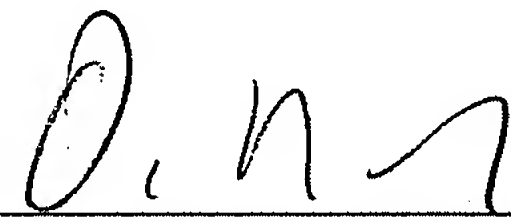
None.

XI. CONCLUSION

For the reasons cited above, Appellants respectfully submit that the outstanding rejections are improper and requests reversal thereof. The Office is invited to contact Appellants' attorney at the below-listed telephone number regarding this Appeal Brief or otherwise concerning the present application for patent. Appellants hereby petition under 37 C.F.R. §1.136 and/or §1.137 for any extension of time necessary for entry and consideration of this Appeal Brief. If there are any additional charges with respect to this Appeal Brief, or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Appellants' attorneys.

Respectfully submitted,

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